

REMARKS

The Examiner has issued a restriction requirement alleging that the application claims eighteen separate inventions. Specifically, the Examiner identified the eighteen inventions as being:

I – III. Claims 1- 20, drawn to multiple inventions including three classes of cysteine-modified hydrolases: (I) α/β hydrolases, (II) subtilisins, and (III) chymotrypsins, classified in class 435, and respectively, subclasses 212, 219, and 226;

IV-VI. Claims 21- 30, drawn to multiple inventions of methods of using cysteine- (I) α/β hydrolases, (II) subtilisins, and (III) chymotrypsins to form a covalent bond between an ester and a primary amine, classified in class 435, subclass 128.

VII-IX. Claims 31-37, drawn to multiple inventions of methods of using cysteine- (I) α/β hydrolases, (II) subtilisins, and (III) chymotrypsins and an acyl donor to resolve a mixture of racemic primary and secondary alcohols by transesterification, classified in class 435, subclass 233.

X-XII. Claims 38-42, drawn to multiple inventions of methods of using cysteine- (I) α/β hydrolases, (II) subtilisins, and (III) chymotrypsins to form a covalent bond between a chiral compound and a substrate by any one of a transamidation, transesterification, or transpeptidation reaction, classified in class 435, subclass 193.

XIII-XV. Claims 43-50, drawn to multiple inventions of methods of using cysteine (I) α/β hydrolases, (II) subtilisins, and (III) chymotrypsins to lengthen a polypeptide by forming a peptide bond between an amino acid ester at the carboxyl terminus of a polypeptide with the primary amine of an amino acid, classified in class 435, subclass 68.1.

XVI-XVIII. Claims 51-62, drawn to multiple inventions of methods of using cysteine- (I) α/β hydrolases, (II) subtilisins, and (III) chymotrypsins capable of conducting any of a transamidation, transesterification, or transpeptidation reaction comprising selecting one or more amino acid positions in a subsite region mediating substrate binding for replacement with a cysteine, recombinantly producing a (I) α/β hydrolase, (II) a subtilisin, or a (III) chymotrypsin having at least one cysteine replacement in at least one substrate binding site region, and forming a covalent bond between the thiol group of the cysteine and a non-peptide chemical compound, classified in class 435, subclass 69.1.

Pursuant to 37 C.F.R. §1.142, Applicants elect Group II, Claims 1- 20 drawn to subtilisins, without traverse.

Further, the Examiner has required that Applicants “elect a single disclosed species from among the species listed in A, [above,] for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently claims 1-20 are generic”. (See Office action pages 7 and 8).

Accordingly, Applicants elect species 2 as listed in A: “A subtilisin modified by the replacement of a cysteine for an amino acid at an S_1 subsite position 156 as numbered by correspondence with positions in the amino acid sequence of the mature subtilisin BPN’. “ (See page 7 of the Office Action).

Claims 1- 20 encompass the elected invention.

Applicants reserve the right pursuant to 37 C.F.R. §1.141 to pursue claims to the non-elected species in this application in the event that a generic claim is found allowable.

In the event that the elected product claims are found allowable, Applicants reserve the right to the rejoinder of the non-elected process claims in accordance with the provisions of MPEP § 821.04.

Applicants also reserve the right pursuant to 35 U.S.C. §121 to file one or more divisional applications directed to the non-elected inventions or species during the pendency of the present application.

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Pursuant to the entry of the present election, Claims 1-20 are pending , and
Claims 21-62 are withdrawn.

CONCLUSION

Applicants submit that this paper fully addresses the Restriction Requirement mailed November 21, 2007. Should the Examiner have any questions, the Examiner is encouraged to contact the undersigned at (650) 846-7636.

The Commissioner is authorized to charge any fees which may be required to Deposit Account No. 07-1048 (Docket No. GC566-2-C1).

Respectfully submitted,

Date: December 21, 2007

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